How it works

Algorithmic Achievements

RSG & IMPACT
Remote Sensing Software Graz

Sensor Modelling  Automatic Tie-Pointing  Bundle Adjustment  Ortho-Rectification
Co-Registration  Mosaicing  Image Matching  3D Mapping
SAR Interferometry  DEM Manipulation  Change Detection  Value Adding
LIDAR Processing  Classification  Radiometric Calibration  Visualization & Analysis

Customized Workflows

- Platform independent, running on Windows and Linux
- Modular design & high flexibility
- Interactive menu-driven & batch operating
- Automatic execution via command lines & scripts
- Simple creation of processing lines
- Execution of custom-tailored workflows
Application-specific Toolboxes

- Near-real-time direct ortho rectification
- Aerotriangulation
- True ortho-photo generation and image mosaicking (RGB, NIR, thermal)
- DSM / DTM / nDSM production

- Georeferenced multi-sensor image stacks
- 3D mapping (photogrammetry and radargrammetry)
- Large area small scale DSM / DTM / nDSM generation
- Multi-sensor image matching (optical and SAR)

- Surface mapping
- Landslide monitoring
- Ice/glacier movement
- Persistent scattering methods

- Derivation of forest parameters
- Forest stability
- Forest inventory support
- Carbon assessment in tropical countries for REDD initiatives

Supporting a Variety of Image Data

High resolution optical
Ikonos, WorldView, QuickBird, GeoEye, Pléiades

High resolution SAR
TerraSAR-X, COSMO-SkyMed, Radarsat-2

Aerial cameras
Ultracam, PhaseOne, Prosilica (RGB, NIR, thermal)

LIDAR data

Medium/low resolution optical
Landsat 4-8, Spot 1-6, JERS-OPS, IRS-1C/D, IRS-P5, Aster, Envisat-MERIS, Alos-AVNIR, Alos-PRISM, RapidEye, Sentinel-2

Low/medium resolution SAR
ERS-1/2, JERS-SAR, X-SAR, Envisat-ASAR, Radarsat-1, Alos-PAL SAR, Sentinel-1
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